

Date: Wednesday, 12/5/2007 10:27:34 AM
 User: Kim Johnston

Process Sheet

2

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: 206L/L3/L4/407 LOW, 407 HIGH GEAR SKID
Job Number	: 36133		
Estimate Number	: 10549		
P.O. Number	:	Part Number	: D206642311
This Issue	: 12/5/2007 S.O. No. :	Drawing Number	: N/A
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: / / Type : LANDING GEAR	Drawing Revision	: L
Previous Run	: 36132	Material	:
Written By	:	Due Date	: 1/10/2008 Qty: 1 Um: Each
Checked & Approved By	: <u>AS 07/12/05</u>		
Comment	: Est Rev: 05.10.11 Added D3429-1 per CHG004 KJ/CP/JL M/EC Est Rev:K 07-12-04 ECN 1080p DD verified by:		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	DC	DOCUMENT CONTROL
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Comment: DOCUMENT CONTROL

Photocopy bluefile and create labels per PPP D206-642-311 CHG004

2.0	36133A	206 L HIGH GEAR SKIDTUBE
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Comment: Sub-Component 206L/407 LOW, 407 HIGH GEAR SKIDTUBE

D206-642-341 B

3.0	PACKAGING 1	PACKAGING RESOURCE #1
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Comment: PACKAGING RESOURCE #1

Pick Packing Kit

4.0	D206648011	GHW Modification Kit
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Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

GHW Modification Kit

Batch: 1536140

5.0	D2652	Bushing
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Comment: Qty.: 16.0000 Each(s)/Unit Total : 16.0000 Each(s)

BUSHING

Pick:

Qty Part Number Description

16 D2652 Bushing

1 D206-642-341(REF)

Batch

1536140

1536150

8/1/15 SQ

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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Job Number: 36133

Part Number: D206642311

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

D2655

Ring



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

TOW RING

Pick:

Qty	Part Number	Description
1	D2655	Tow Ring

Batch

1234613

SP

7.0

D2712

Set Screw



Comment: Qty.: 10.0000 Each(s)/Unit Total : 10.0000 Each(s)

SET SCREW

Pick:

Qty	Part Number	Description
10	D2712	Set Screw

Batch

1234628

SP

8.0

D29321

206 Saddle Left side



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

SADDLE

Pick:

Qty	Part Number	Description
1	D2932-1	Saddle

Batch

1234615

SP

9.0

D29331

206 Saddle Left



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

SADDLE

Pick:

Qty	Part Number	Description
1	D2933-1	Saddle

Batch

1234629

SP

10.0

D2934

Saddle Spacer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

SADDLE SPACER

Pick:

Qty	Part Number	Description
2	D2934	Saddle Spacer

Batch

1234630

8/1/15 SP (12)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Job Number: 36133

Part Number: D206642311

Job Number:



Seq. #:

Machine Or Operation:

Description :

11.0

D2935

Saddle Spacer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

SADDLE SPACER

Pick:

Qty	Part Number	Description	Batch
2	D2935	Saddle Spacer	334174

SQ

12.0

D29381

206 Saddle Left side



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

SADDLE

Pick:

Qty	Part Number	Description	Batch
1	D2938-1	Saddle	B36890

8/1/05

13.0

D29391

206 Saddle Left side



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

SADDLE

Pick:

Qty	Part Number	Description	Batch
1	D2939-1	Saddle	B34632

SQ

14.0

D2968043

Tow Ring



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

TOW RING

Pick:

Qty	Part Number	Description	Batch
1	D2968-043	Tow Ring	B32503

SQ

15.0

AN341A

Bolt



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

BOLT

Pick:

Qty	Part Number	Description	Batch
8	AN3-41A	Bolt	M10580

8/1/05 (12)

Dart Aerospace Ltd

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Job Number: 36133

Part Number: D206642311

Job Number:



Seq. #:

Machine Or Operation:

Description :

16.0

AN45A

Bolt



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

BOLT

Pick:

Qty	Part Number	Description	Batch
1	AN4-5A	Bolt	<u>M100857</u>

8/1/28

17.0

AN46A

Bolt



Comment: Qty.: 12.0000 Each(s)/Unit Total : 12.0000 Each(s)

BOLT

Pick:

Qty	Part Number	Description	Batch
12	AN4-6A	Bolt	<u>M106662</u>

SC

18.0

AN510A

Bolt



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

BOLT

Pick:

Qty	Part Number	Description	Batch
4	AN5-10A	Bolt	<u>M104746</u>

(or AN5-11A)

Choice of bolt will depend on crosstube

SC

19.0

AN511A

Bolt



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

BOLT

Pick:

Qty	Part Number	Description	Batch
4	AN5-11A	Bolt	<u>M105810</u>

(or AN5-12A)

Choice of bolt will depend on crosstube

SC

20.0

AN96JD10

Washer



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

WASHER

Pick:

Qty	Part Number	Description	Batch

8/1/14 SC (1x)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Job Number: 36133

Part Number: D206642311

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Seq. #:

Machine Or Operation:

Description :

8

AN960JD10

Washer

21.0

AN960JD1016

Washer



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WASHER

Pick:

Qty	Part Number	Description	Batch
1	AN960JD1016	Washer	<u>M5519</u>

SP

22.0

AN960JD416

Washer



Comment: Qty.: 25.0000 Each(s)/Unit Total : 25.0000 Each(s)

WASHER

Pick:

Qty	Part Number	Description	Batch
25	AN960JD416	Washer	<u>M105906</u>

SP

23.0

AN960JD516

Washer



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

WASHER

Pick:

Qty	Part Number	Description	Batch
8	AN960JD516	Washer	<u>M104515</u>

SP

24.0

AN9704

Washer



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WASHER

Pick:

Qty	Part Number	Description	Batch
1	AN970-4	Washer	<u>M108442</u>

SP

25.0

MS21042L3

Nut



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)


NUT

Pick:

8/1/1450 (12)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA:  Date: 08/01/31
QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Job Number: 36133

Part Number: D206642311

Job Number:



Seq. #:

Machine Or Operation:

Description :

Qty	Part Number	Description	Batch
8	MS21042L3	Nut	<u>105558</u>

26.0

MS21042L4

Nut



Comment: Qty.: 13.0000 Each(s)/Unit Total : 13.0000 Each(s)

NUT

Pick:

Qty	Part Number	Description	Batch
13	MS21042L4	Nut	<u>M105054</u>

8/1/14 SP (1x)

27.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT KITS 100% FOR COMPLETENESS

2051624 (1x)

28.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D206-642-311

Location: ①

PPP Rev: ①

8/1/29 SP (1x)

29.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

D0810113

Job Completion



in 2008/1/31 ①

✓

36133A

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Wednesday, 12/5/2007 10:28:02 AM
Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : 206 L HIGH GEAR SKIDTUBE
 Job Number : 36133A
 Estimate Number : 10539
 P.O. Number :
 This Issue : 12/5/2007 S.O. No. :
 Prsht Rev. : NC Part Number : D206642341
 First Issue : 1 / 1 Type : LANDING GEAR Drawing Number : D2650 REV E
 Drawing Revision : E
 Previous Run : 36132A Material :
 Due Date : 1/10/2008 Qty: 1 Um: Each
 Written By :
 Checked & Approved By : 12/07/05
 Comment : Est Rev: 05.10.11 Added D3429-1 per CHG004 KJ/CP/JL
 M

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description:

1.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Photocopy bluefile and create labels per PPP D206-642-341 CHG002

N/A

2.0

D2620

Bent 206 Skidtube



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

1 D2620

Bent Tube 3" OD

B 34693 ①

K 7-12-10

3.0

D2647

Cap



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

1 D2647

Fwd Cap

B 22328

BE 07-12-10

4.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Deburr Fwd edge of tube

2-Remove ridge on inside of Fwd edge of tube as per Dwg D2650

3-Weld Fwd Cap as per Dwg D2650. Use aluminum rod. Grind D2647 to fit as required.

A/R Aluminum Rod

M 105138 / M100035

BE 07-12-10

4-Grind weld flush to cap on top surface only.

BE 07-12-17

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206 L HIGH GEAR SKIDTUBE

Job Number: 36133A

Part Number: D206642341

Job Number:



Seq. #:

Machine Or Operation:

Description :

5-Cut aft end to length as per dwg D2650

6-Drill pilot holes using drill Jig DT8168A (A, & B). Open to Ø0.312"

7-Drill holes for wearplates using DT 8028-5. Open to Ø 0.297".

8-Open Aft Cap Hole using #6 Drill Bit

9-Open holes for Tow Ring to Ø0.625" as per Dwg D2650, D2650-5 Drilling Detail

10-Remove inner indexing ridge on aft end of skidtube as per Dwg D2650

11-Deburr and Blow out all chips from inside the tube

BE 07-12-17

5.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

BE 07-12-17

6.0

D26545

206 L Beam (Web)



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

1 D2654-5

Web

35993

BE 07-12-17

7.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Open holes to finished size as per Dwg D2650, D2650-5 Drilling Detail (without cutting fluid)

2-Countersink crossbolt spacer holes as per Dwg D2650 (without cutting fluid)

3-Deburr. Blow out chips. Grind alodine off around crossbolt spacer.

4-Bond D2654-5 web in place as per QSI 015 Ensure holes line up Allow 12 Hrs. cure time before cutting

Start Date: 7-12-17 Time: 3:50

Finish Date: 7/12/18 Time: 9:55 AM

A/R - Sikaflex-291

Sikaflex expiry date: 8-7-17

BE 07-12-17

SL 7-12-17

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206 L HIGH GEAR SKIDTUBE

Job Number: 36133A

Part Number: D206642341

Job Number:



Seq. #:

Machine Or Operation:

Description :

8.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

6/2/12/18

9.0

D2649

Crossbolt Spacer



Comment: Qty.: 19.0000 Each(s)/Unit Total : 19.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

19 D2649

Crossbolt spacer

B34508

BE 07/12/18

10.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Insert cross bolt spacers D2649. Weld as per QSI 004 and Dwg D2650. Remember to back drill each hole to 0.25" before welding the other side. Use aluminum rod.

A/R Aluminum Rod

M105K38

BE 07/12/18

2-Grind welds flush as per Dwg D2650. Masking Tape access to inside of the Skidtube

A.MOS. 01.07

①

3-Counterbore 5/16" x 0.750" deep as per Dwg D2650Deburr

K 8-1-7

11.0

D2680041

Nut Plate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D2680-041

Nut Plate

B34599

①

K

8-1-7

12.0

CCR264SS33

Cherry Rivet



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 CCR264SS3-3

Rivets

M103525

②

K

8-1-7

13.0

M7885343

Rivet



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number

Description Batch

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Drawing Name: 206 L HIGH GEAR SKIDTUBE

Job Number: 36133A

Part Number: D206642341

Job Number:



Seq. #:

Machine Or Operation:

Description:

2 M7885/3-4-3

Rivets

M102515 ② M 8-1-7

14.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Install D2680-041 Nut Plate as per Dwg D2650

① M 8-1-7

15.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

PD 080107 ①

16.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

08/01/08

17.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Pressure wash as per QSI 005

HA 08-01-09

(X1)

18.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White (Ref. 4.3.5.1) as per QSI 005 4.3

Make sure Nut Plate Thread protected use paint screw

m-k 08/01/10

(1X)

19.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

FL 08/01/14 ①

20.0

D26483

Wearpad



Comment: Qty.: 6.0000 Each(s)/Unit Total: 6.0000 Each(s)

Pick:

Qty Part Number

Description Batch

6 D2648-3

Wearpad

B33992

FL

21.0

D265611

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D2656-11

Wearshoe

B32818

FL 08/01/14 ①

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
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Job Number: 36133A

Part Number: D206642341

Job Number:



Seq. #:

Machine Or Operation:

Description :

22.0

D265623

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D2656-23

Wearshoe

B34171

FL

23.0

D265635

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D2656-35

Wearshoe

B32873

FL

24.0

D34291



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D3429-1

Wearpad

D34609

FL

25.0

ALS41032130

Insert



Comment: Qty.: 54.0000 Each(s)/Unit Total : 54.0000 Each(s)

Pick:

Qty Part Number

Description Batch

54 ALS4-1032-130

Inserts

M105729

or (see QSI 017)

FL

26.0

AN960JD10L

Washer



Comment: Qty.: 54.0000 Each(s)/Unit Total : 54.0000 Each(s)

Pick:

Qty Part Number

Description Batch

54 AN960JD10L

Washer

M104374

FL 08/01/14 @

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Job Number: 36133A

Part Number: D206642341

Job Number:



Seq. #:

Machine Or Operation:

Description :

27.0

MS27039108

Screw



Comment: Qty.: 54.0000 Each(s)/Unit Total : 54.0000 Each(s)

Pick:

Qty Part Number

Description Batch

54 MS27039-1-08

Screw

m 106589

FL

28.0

D26511

Plug



Comment: Qty.: 14.0000 Each(s)/Unit Total : 14.0000 Each(s)

Pick:

Qty Part Number

Description Batch

14 D2651-1

Plugs

D 36153

FL

29.0

D26513

O-Ring



Comment: Qty.: 14.0000 Each(s)/Unit Total : 14.0000 Each(s)

Pick:

Qty Part Number

Description Batch

14 D2651-3

O-Rings

D 34592

FL

30.0

AN960JD416

Washer



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 AN960JD416

Washer

m 105426

FL

31.0

MS27039406

Screw



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 MS27039-4-06

Screw

m 15194

FL

32.0

D2646

Aft Cap



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

FL 08/01/14 ①

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 12/5/2007 10:28:03 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206 L HIGH GEAR SKIDTUBE

Job Number: 36133A

Part Number: D206642341

Job Number:



Seq. #:

Machine Or Operation:

Description :

1 D2646

Aft Cap

B36184

FL

33.0

AN960JD10L

Washer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 AN960JD10L

Washer

M104374

FL

34.0

MS27039108

Screw



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 MS27039-1-08

Screw

M106589

FL

35.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

1-Install inserts & wearpads as per dwg D2922. Use a drop of Sikaflex inside insert holes before installing wearpad/wearplate.

A/R Sikaflex-291

Sikaflex expiry date:

M105585
08-07

2-Install O-Rings D2651-3 on plugs D2651-1 with Petroleum Jelly and install plugs as per Dwg D2650.
Clean excess adhesive

3-Install MS27039-4-06 Screw as per DEO 9153

4-Inspect for foreign object per QSI 024

5-Install D2646 Aft Cap and seal with SikaflexClean excess adhesive

A/R Sikaflex-291

Sikaflex expiry date:

M105585
08-07

6-Wing Walk as per Dwg D2650-5 and QSI 005 4.4

Batch:

M106332

M-L

08/01/14

(IX)

FL
08/01/14
(1)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: AD Date: 28/01/31
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 12/5/2007 10:28:03 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206 L HIGH GEAR SKIDTUBE

Job Number: 36133A

Part Number: D206642341

Job Number:



Seq. #:

Machine Or Operation:

Description :

36.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

08/01/14 (X)

37.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

08/01/14 (X)

38.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location:

PPR. # 36133 # 8/1/14 (X)

39.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08/01/31

Job Completion



08/01/31

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN <i>AP</i>	DRAWN BY <i>AP</i>	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
CHECKED <i>PH</i>	APPROVED <i>PH</i>	DRAWING NO. D2650	REV. E SHEET 1 OF 5
DATE 06.03.30		TITLE 206/407 SKIDTUBE ASSEMBLIES	SCALE NTS
A	97.03.25	NEW ISSUE	
B	97.06.26	AS MANUFACTURED CHANGES	
C	97.10.29	CHANGE HOLE PATTERN AND FRONT END	
D	04.05.17	REDRAW; INCORP. DE09136/9153/9163 MOD GROUND HNDLNG ON D2650-1/-3	
E	06.03.30	RMV C'BORE, CHG DRILL, ADD CHAMFER	

RELEASED
16 04 17 *PH*

Qty -1	Qty -3	Qty -5	Qty -7	Part Number	Description
X				D2650-1	SKIDTUBE ASSEMBLY
	X			D2650-3	SKIDTUBE ASSEMBLY
		X		D2650-5	SKIDTUBE ASSEMBLY
			X	D2650-7	SKIDTUBE ASSEMBLY
1	1	1	1	D2600-1-160	EXTRUSION
1				D2654-1	WEB
	1			D2654-3	WEB
		1		D2654-5	WEB
			1	D2654-7	WEB
1	1	1	1	D2646	AFT CAP
1	1	1	1	D2647	CAP
16	17	19	23	D2649	CROSS BOLT SPACER
16	18	14	22	D2651-1	PLUG
16	18	14	22	D2651-3	O-RING
1	1	1	1	D2680-041	NUT PLATE
2	2			D3286-1	DOUBLER
2	2			D3286-3	STUD
42	44	54	60	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, ALS7-1032-130)
2	2	2	2	AN960JD10L	WASHER
2	2	2	2	CCR264SS3-3	RIVET
2	2	2	2	CR3212-4-03	RIVET
2	2	2	2	MS27039-1-08	SCREW
1	1	1	1	MS27039-4-06	SCREW
1	1	1	1	AN960JD416	WASHER
52	52			CR3212-4-04	RIVET

NOTES

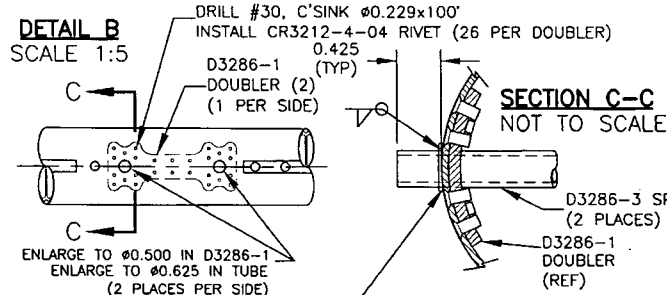
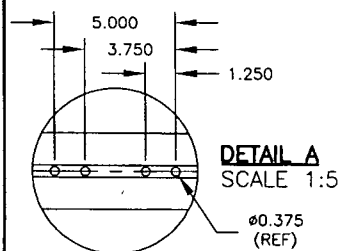
- WELD PER DART QSI 004
- DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
- BOND WEB INTO OUTER TUBE WITH SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015
- INSERT D2651-1 PLUG C/W D2651-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE)
- FINISH: -CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
-POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
-BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER DART QSI 005 4.4
- DRILL Ø0.297 FOR ALS7-1032-130 INSERTS USING TEMPLATE DT8056-1 ON -1 TUBE, DT8056-3 ON -3 TUBE, DT8056-5 ON -5 TUBE, AND DT8056-7 ON -7 TUBE. INSTALL INSERTS AFTER FINISH.
- TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

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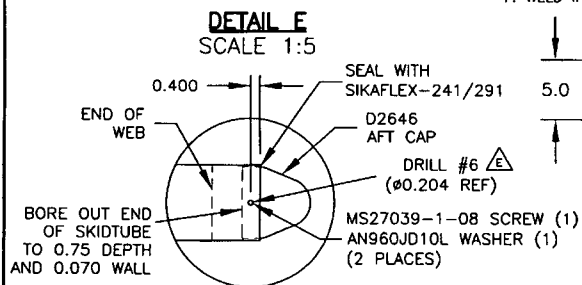
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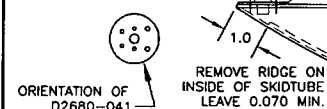
- TO INSTALL D3286-1/-3:
1. GRIND OFF FLANGE IN AREA SHOWN, FLUSH WITH ROUND TUBE
 2. LOCATE & DRILL D3286-1 DOUBLER USING DT3286-1T1
 3. ENLARGE HOLES IN D3286-1 TO $\phi 0.500$
 4. ENLARGE HOLES IN TUBE TO $\phi 0.625$ AND CHAMFER HOLE $0.030 \times 45^\circ$
 5. RIVET D3286-1 TO TUBE
 6. INSERT D3286-3 SPACER
 7. WELD IN PLACE AND GRIND FLUSH



DETAIL F (NOT TO SCALE)

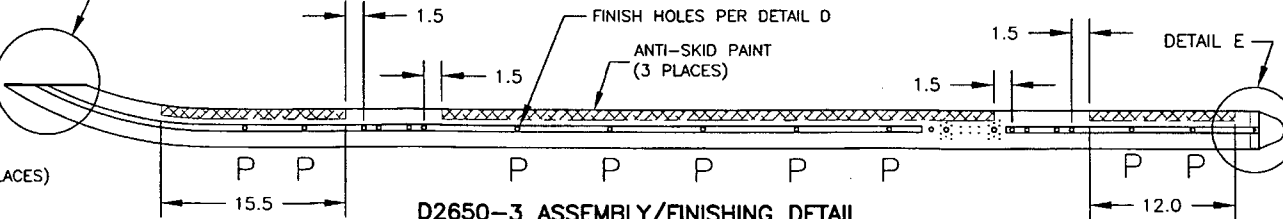
1. CUT TUBE LEVEL
2. REMOVE RIDGE ON FWD SIDE
3. LOCATE D2647 (TRIM AS NECESSARY)
4. WELD D2647 IN PLACE PER DART QSI 004
5. GRIND FLUSH
6. RIVET D2680-041 NUT PLATE IN PLACE

NOTE: MASK THREADS IN D2680-041 PRIOR TO FINISH



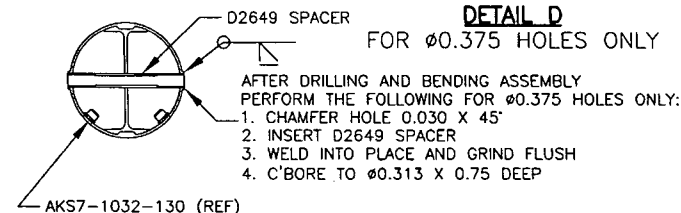
ORIENTATION OF D2680-041

DETAIL F



D2650-3 BENDING/DRILLING DETAIL

D2650-3 ASSEMBLY/FINISHING DETAIL



RELEASED

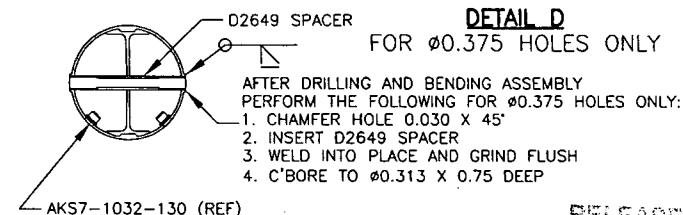
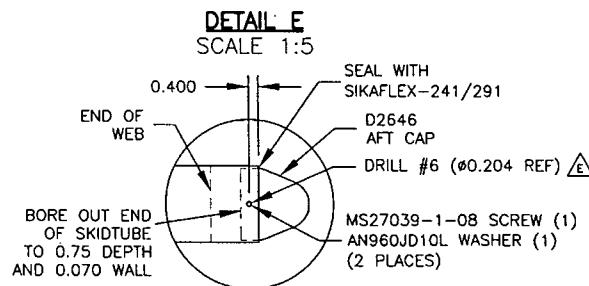
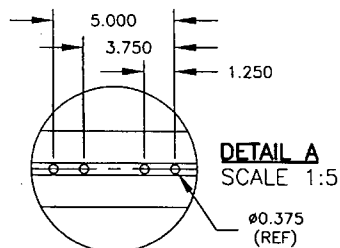
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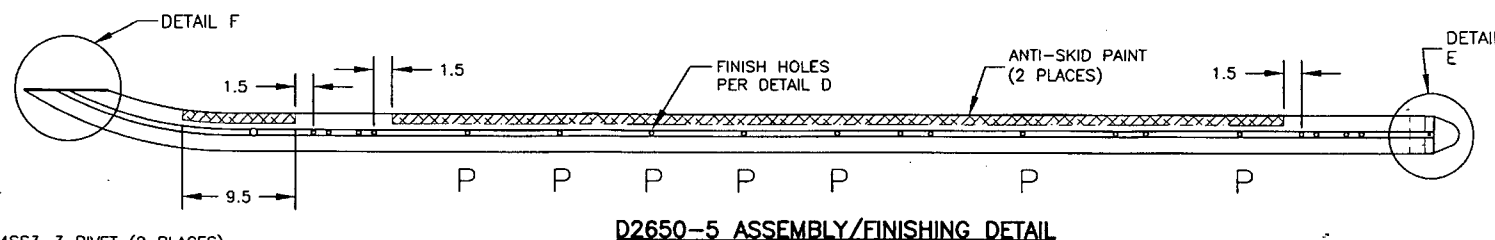
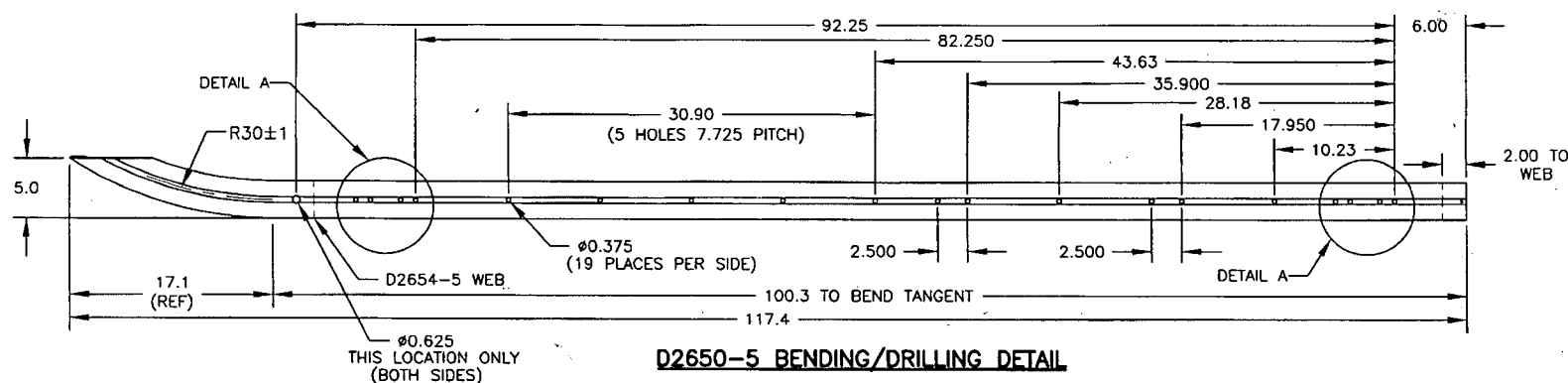
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CHECKED	APPROVED	DART AEROSPACE USA, INC.	SHEET 3 OF 5
DATE	TITLE	DART AEROSPACE USA, INC.	SCALE
06.03.30	SKIDTUBE		1:10

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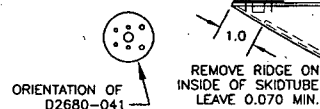
RELEASED



DETAIL F (NOT TO SCALE)

1. CUT TUBE LEVEL
2. REMOVE RIDGE ON FWD SIDE
3. LOCATE D2647 (TRIM AS NECESSARY)
4. WELD D2647 IN PLACE PER DART QSI 004
5. GRIND FLUSH
6. RIVET D2680-041 NUT PLATE IN PLACE

NOTE: MASK THREADS IN D2680-041 PRIOR TO FINISH



NO. 36133A
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DATE 06.03.30		TITLE SKIDTUBE		SCALE 1:10	

1:10

NO. 157

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name Barclay E
Joint Welding Procedure GTAW
Part number and Job number DACB 612 341 / B 36135

TEST WELDS REQUIRED

BASE METAL Aluminum WELDING PROCESS tc
Penetration Complete ☐ Partial ☒ Single Weld ☒ Double Weld ☐
Current AC ☒ DC ☐ Backing YES ☐ NO ☒

	Position	Vertical	Down <input type="checkbox"/>	Up <input type="checkbox"/>
Sheet Groove	1G <input type="checkbox"/>	2G <input type="checkbox"/>	3G <input type="checkbox"/>	4G <input type="checkbox"/>
Tube Groove	1G <input type="checkbox"/>	2G <input type="checkbox"/>	5G <input type="checkbox"/>	6G <input type="checkbox"/>
Sheet Fillet	1F <input type="checkbox"/>	2F <input type="checkbox"/>	3F <input type="checkbox"/>	4F <input type="checkbox"/>
Tube Fillet	1F <input type="checkbox"/>	2F <input type="checkbox"/>	4F <input type="checkbox"/>	5F <input type="checkbox"/>

Crossbolt Spacer Welded into Skid tube

TEST RESULTS

Visual Pass ☒ Fail ☐
Penetration Pass ☒ Fail ☐
Crossbolt Spacer Pass ☒ Fail ☐

The above named individual is qualified in accordance with AWS D17.1.2001 to weld

Date of Test Coupon 08-01-07 Qualifier Det. Daniel